

Supplementary Information

Table S1. Genes and specific primers used for real-time PCR.

| NO. | Accession | Gene Name | | Primer Sequence | Tm (°C) | Product Length (bp) |
|-----|--------------------|-----------|----|----------------------------------|---------|---------------------|
| - | - | β-actin | -F | 5'-AGGTTATGCTCTTCCTCACGCTAT-3' | 57.7 | - |
| | | | -R | 5'-TCGCTCGTTGCCGATGGT-3' | 59.6 | |
| A1 | comp76725_c0_seq6 | FOXO1 | -F | 5'-GAGGCAGGGCGAAGAAAA-3' | 61.41 | 110 |
| | | | -R | 5'-CCCCAAAGAAAACGGAAGTG-3' | 61.74 | |
| A2 | comp78415_c0_seq14 | ADCY2 | -F | 5'-AGCTGCGTGGAGAAGATCAAA-3' | 62.35 | 122 |
| | | | -R | 5'-GCAAACCTCCGTC AATACACCAA-3' | 62.16 | |
| A3 | comp79708_c0_seq1 | STAT5B | -F | 5'-AGAAACCAGATTTTCAGCGTCAG-3' | 61.97 | 109 |
| | | | -R | 5'-CCTTGGCTTGGCTCTCACTT-3' | 61.84 | |
| A4 | comp74062_c0_seq5 | NEU1 | -F | 5'-GGAGTTACGACGGAGGTCAAA-3' | 61.41 | 142 |
| | | | -R | 5'-ACTCTCTTGCTGGTGCTTGCT-3' | 61.67 | |
| A5 | com78701_c0_seq2 | AP-1 | -F | 5'-CACGGTCGGCTACGCTAAGT-3' | 62.62 | 137 |
| | | | -R | 5'-TCCCTTCTTGTTCCCTCTGCTTC-3' | 62.1 | |
| A6 | comp76401_c0_seq2 | VPS37 | -F | 5'-GCCTGTCGGCTTTTAATTTGTC-3' | 62.11 | 97 |
| | | | -R | 5'-TTTTCTCTGGCGTCTTGTCTC-3' | 62.07 | |
| A7 | comp76122_c1_seq21 | NCK2 | -F | 5'-CCACAGATCGTTGAGCTTCATT-3' | 61.56 | 126 |
| | | | -R | 5'-TCTCGGTTTTTCATCCTCATAGTTTC-3' | 61.91 | |
| A9 | comp77146_c0_seq3 | MAP3K4 | -F | 5'-CCCCATTTTCCTGTTTCTTATCC-3' | 61.97 | 82 |
| | | | -R | 5'-GGTCGGCTTGCTCTAATCT-3' | 60.78 | |
| A12 | comp72396_c0_seq2 | DDX47 | -F | 5'-ACTTTGACATACCGACGCACTC-3' | 61.48 | 275 |
| | | | -R | 5'-ACTTCCACCTCTGCCTTCTTCT-3' | 61.94 | |
| A13 | comp72841_c2_seq2 | Trmt1 | -F | 5'-GGTTATCAAGTTTCAGGCACTCAC-3' | 61.25 | 119 |
| | | | -R | 5'-TTTTCTCTCTTCACAGGTTTTCC-3' | 62.07 | |
| A14 | comp73256_c0_seq3 | Hrsp12 | -F | 5'-ATGGTAGAGGGCGGTATTGAG-3' | 60.35 | 179 |
| | | | -R | 5'-GGGAACTTGTCCGTGAAATAGG-3' | 61.92 | |
| A15 | comp74533_c0_seq6 | CNOT10 | -F | 5'-TGGTCATTTATATGCAGCAGAGG-3' | 61.34 | 116 |
| | | | -R | 5'-CAGGAGAGGCAGGGTAGATAACA-3' | 61.83 | |

Table S1. *Cont.*

| NO. | Accession | Gene Name | | Primer Sequence | Tm (°C) | Product Length (bp) |
|-----|--------------------|-----------|----|------------------------------------|---------|---------------------|
| A17 | comp74908_c0_seq5 | ehhadh | -F | 5'-GGTTTGCTATGGGTGCCTTC-3' | 61.76 | 96 |
| | | | -R | 5'-GCCCCCTCCCTCGTGATAAA-3' | 62.27 | |
| A18 | comp75055_c2_seq2 | DHX35 | -F | 5'-TGCAAAGAAGTGACCTTGGAAC-3' | 61.56 | 140 |
| | | | -R | 5'-GGCACCCAGAGCATAGAGGA-3' | 62.65 | |
| A20 | comp76071_c1_seq12 | Map2k6 | -F | 5'-TAACGCAGATGTCCATCACAAGA-3' | 62.84 | 138 |
| | | | -R | 5'-GCCTCCGTCAGCAAATCAC-3' | 61.79 | |
| A21 | comp76305_c0_seq6 | Gvin1 | -F | 5'-CTAACTGTCGTTGGTGCTGTATTTT-3' | 60.80 | 87 |
| | | | -R | 5'-CTGTTTCCCTTGGTTGATGTAGTT-3' | 60.65 | |
| A23 | comp76725_c0_seq4 | PRPFF19 | -F | 5'-GCAGAGCGTAAGAAACGAGGA-3' | 61.93 | 92 |
| | | | -R | 5'-CCTGGATGAGAGGCTTTAGGTTT-3' | 62.07 | |
| A24 | comp77143_c0_seq19 | Mapkap1 | -F | 5'-ATCGGGAACCAGCATCAAAA-3' | 62.66 | 222 |
| | | | -R | 5'-TCGTCCACTTCACCCTCCTC-3' | 62.60 | |
| A25 | comp77913_c0_seq1 | V1g163483 | -F | 5'-AACACCAGGTACAATCGTGGAA-3' | 61.56 | 101 |
| | | | -R | 5'-TGGGCATCTCGGCAAAC-3' | 61.82 | |
| A27 | comp78900_c0_seq70 | ND5 | -F | 5'-TCTACTCGAACGGATGCGAAA-3' | 63.04 | 228 |
| | | | -R | 5'-CCACGGATGAAGCCCAAA-3' | 62.99 | |
| A29 | comp80082_c0_seq9 | Usp39 | -F | 5'-AATGGTACGAGATAACAAGACCTTCA-3' | 60.29 | 135 |
| | | | -R | 5'-CTGTGCTGTACCTGCGTTAG-3' | 62.01 | |
| A30 | comp80196_c0_seq6 | Hsp70Ab | -F | 5'-GGGAATGGGATGGCGTTAG-3' | 62.51 | 138 |
| | | | -R | 5'-CGATCCTGATGATAGTGA CT TGT TG-3' | 62.09 | |
| S1 | comp79328_c1_seq13 | NFKB | -F | 5'-TGGAGTTGCCTTCCCACA-3' | 61.26 | 133 |
| | | | -R | 5'-GAAAAGCACCCGCCACA-3' | 61.84 | |
| S2 | comp74502_c1_s | ADCY2 | -F | 5'-AAAAGTTTTCCAGACTTCCAGATCC-3' | 62.21 | 83 |
| | | | -R | 5'-GCCACGAGAATACACAGCA-3' | 62.21 | |

Table S1. Cont.

| NO. | Accession | Gene Name | | Primer Sequence | Tm (°C) | Product Length (bp) |
|-----|--------------------|-----------|----|---------------------------------|---------|---------------------|
| S3 | comp78293_c0_seq2 | ABCA2 | -F | 5'-ACCAGGAAGCTGGGAAAACA-3' | 61.94 | 83 |
| | | | -R | 5'-ACCCCTAAAAGACCAAAGCACTC-3' | 61.99 | |
| S4 | comp78293_c0_seq4 | ABCA2 | -F | 5'-GAGTCCTGAACAACGAAACAGAAA-3' | 61.86 | 149 |
| | | | -R | 5'-CACCCCTAAAAGACCAAAGCAC-3' | 62.06 | |
| S5 | comp79570_c0_seq6 | SGSH | -F | 5'-TGAGGAGATGAAGAAGTCCCTGT-3' | 61.52 | 102 |
| | | | -R | 5'-AAATCAGCACACCCATCCAA-3' | 61.31 | |
| S6 | comp77223_c0_seq3 | ABCA2 | -F | 5'-TATGACCGCTGCTCTGATGG-3' | 62.31 | 148 |
| | | | -R | 5'-TCCAGGCTTTGCTCTGTGG-3' | 62.52 | |
| S7 | comp80153_c0_seq15 | AP-3 | -F | 5'-CAGCGATCAGTTTGCACGA-3' | 62.18 | 143 |
| | | | -R | 5'-CCACTCTCTCCACCACTCCA-3' | 61.29 | |
| S8 | comp78750_c3_seq11 | DNase II | -F | 5'-GAAGATAGTCAGCAGCGTGGAA-3' | 61.81 | 104 |
| | | | -R | 5'-CTGTGGTTGATTTTGTGGTGAG-3' | 61.7 | |
| S9 | comp77471_c1_seq34 | rabaptin5 | -F | 5'-AGATGGCAAACGATCAATTCCT-3' | 62.04 | 141 |
| | | | -R | 5'-TCTCTTGTTCCCTCTCGCTGTTG-3' | 62 | |
| S11 | comp77877_c0_seq1 | CHMP5 | -F | 5'-AGACGTTGAAAGATACCAAAACCAC-3' | 61.75 | 145 |
| | | | -R | 5'-ACCTCGTCCGTCATTCCA-3' | 61.48 | |
| S12 | comp75233_c0_seq13 | PAR6 | -F | 5'-GTCAAACCAGCCAATCAGAGAAA-3' | 62.7 | 190 |
| | | | -R | 5'-GCCTGTCCCTCGTGTGTGTTG-3' | 62.81 | |
| S13 | comp79698_c0_seq6 | EGFR/RTK | -F | 5'-AACGGGGTTTGCAGATG-3' | 62.02 | 160 |
| | | | -R | 5'-TGGGAGGTCTGTGGATTGG-3' | 61.93 | |
| S14 | comp80408_c0_seq17 | FLNA | -F | 5'-ACATACCGTCAGTGTCAAGAACAAG-3' | 61.69 | 107 |
| | | | -R | 5'-CACCTGCGTGAACCTTTGTGAG-3' | 61.86 | |
| S15 | comp73644_c0_seq2 | ARHGAP39 | -F | 5'-ACGACGGAAAACCTTCTTTGAGG-3' | 61.83 | 127 |
| | | | -R | 5'-CGATGTGCTTGCGGATGT-3' | 61.88 | |